IN THE CLAIMS

Please amend the claims (claim 38 only) as follows:

Claim 1 (previously presented) A block based video coding method comprising the steps of:

a) selecting a DC value of one of a left block (B3) and a upper block (B2) based on a comparison of a first value and a second value, the first value being a difference between DC values of a left upper block (B1) and the left block (B3), the second value being a difference between DC values of the left upper block (B1) and the upper block (B2); and

b) predicting the selected DC value as a DC value of a target block (B), thereby generating a predictive DC value of the target block.

2-29 (canceled)

Claim 30 (previously presented) The method as recited in claim 1, wherein said step a) includes the steps of:

a1) obtaining a first differential value which is a difference between DC values of the left upper block (DC_B1) and the upper block (DC_B2);

a2) obtaining a second differential value which is a difference between DC values of the left upper block (DC_B1) and the left block (DC_B3);

a3) comparing the first differential value with the second differential value;

a4) selecting the DC value (DC_B2) of the upper block if the first differential value is larger than the second differential value; and

a5) selecting the DC value (DC_B3) of the left block if the first differential value is smaller than the second differential value.

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Claim 31 (previously presented) The method as recited in Claim 30, wherein the first differential value and the second differential value are absolute values.

Claims 32-36 (canceled)

Claim 37 (previously presented) A block based video coding apparatus, comprising:

selection means for selecting a DC value of one of a left block (B3) and a upper block (B2) based on a comparison of a first value and a second value, the first value being a difference between DC values of a left upper block (B1) and the left block (B3), the second value being a difference between DC values of the left upper block (B1) and the upper block (B2); and

prediction means for predicting the selected DC value as a DC value of a target block (B), thereby generating a predictive DC value of the target block.

Claim 38 (**currently amended**) The apparatus as recited in claim 37, wherein said selection means includes:

means for obtaining a first differential value which is a difference between DC values of the left ~~left~~ upper block (DC_B1) and the upper block (DC_B2);

means for obtaining a second differential value which is a difference between DC values of the left upper block (DC_B1) and the left block (DC_B3);

means for comparing the first differential value with the second differential value;

means for selecting the DC value (DC_B2) of the upper block if the first differential value is larger than the second differential value; and

means for selecting the DC value (DC_B3) of the left block if the first differential value is smaller than the second differential value.

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Claim 39 (previously presented) The apparatus as recited in Claim 37, wherein the first differential value and the second differential value are absolute values.

Claims 40-43 (canceled)

Claim 44 (previously presented) A block based video coding method for coding a target block based on a plurality of neighboring blocks wherein the neighboring blocks include a first block with a predetermined DC value, a second block with a predetermined DC value, and a third block with a predetermined DC value, the method comprising the steps of:

a) determining a first DC differential value based on the difference between the predetermined DC values of the first block and the third block;

b) determining a second DC differential value based on the difference between the predetermined DC values of the first block and the second block;

c) comparing the first DC differential value with the second DC differential value to obtain a predictive DC value;

d) transmitting the predictive DC value to a differential pulse code modulated coder.; and

e) performing differential pulse code modulation coding on the predictive DC value.

Claim 45 (previously presented) The method as recited in claim 44, wherein the predictive DC value is:

a) the predetermined DC value of the second block if the first DC differential value is larger than the second DC differential value; and

b) the predetermined DC value of the third block if the first DC differential value is smaller than the second DC differential value.

Claim 46 (previously presented) The method as recited in claim 44, wherein the first DC differential value and the second DC differential value are absolute values.

Claim 47 (previously presented) The method as recited in claim 44, the method further comprising the steps of:

f) performing differential pulse code modulation coding on a predetermined DC value of target block;

g) generating video information based on the coded predictive DC value and the predetermined DC value of the target block; and

h) transmitting the video information to a decoder.

Claim 48 (previously presented) A block based video coding apparatus for coding a target block based on a plurality of neighboring blocks, the neighboring blocks including a first block with a predetermined DC value, a second block with a predetermined DC value, and a third block with a predetermined DC value, the apparatus comprising the steps of:

selector circuitry for selecting the predetermined DC value of one of the second block and the third block to obtain a predictive DC value for the target block; and

a differential pulse code modulation coder for receiving and coding the predictive DC value from the selector circuitry.

Claim 49 (previously presented) The apparatus as recited in claim 48, wherein the selector circuitry determines the predictive DC value based on the magnitude of one of a difference between the first block predetermined DC value and the third block predetermined DC value and a difference between the first block predetermined DC value and the second block predetermined DC value.

Claim 50 (previously presented) The apparatus as recited in claim 49, wherein said selector circuitry comprises:

memory circuitry for receiving and storing the predetermined DC values of the first block, the second block, and the third block;

a first subtractor in communication with the memory for determining a first value based on the difference between the first block predetermined DC value and the third block predetermined DC value;

a second subtractor in communication with the memory for determining a second value based on the difference between the first block predetermined DC value and the second block predetermined DC value;

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a comparator in communication with the memory and the first and second subtractors for comparing the first value with the second value;.

Claim 51 (previously presented) The apparatus as recited in claim 50, further comprising an absolute value calculator in communication with the comparator and at least one of the first and second subtractors.

Claim 52 (previously presented) The apparatus as recited in claim 48, wherein the differential pulse code modulation coder receives a predetermined DC value for the target block and outputs video information based on coding of the predictive DC value and the predetermined DC value for the target block.

Claim 53 (canceled)

Claim 54 (previously presented) A block based video coding method, comprising the steps of:

a) calculating a vertical gradient of DC coefficients of a left upper block (B1) and a left block (B3), and the horizontal gradient of DC coefficients of the left upper block (B1) and a upper block (B2);

b) comparing the vertical gradient with the horizontal gradient; and

c) selecting one of the DC coefficients of the left block (B3) and the upper block (B2) as the predictive DC coefficient of a target block (B).

Claim 55 (previously presented) The method as recited in claim 54, wherein said step c) includes the steps of:

c1) selecting the DC coefficient (DC_B2) of the upper block as the predicted DC coefficient (DC_P) of the target block if the horizontal gradient is larger than the vertical gradient; and

c2) selecting the DC coefficient (DC_B3) of the left block as the predicted DC coefficient (DC_P) of the target block if the horizontal gradient is smaller than or equal to the vertical gradient.

Claim 56 (previously presented) The method as recited in claim 55, wherein the horizontal gradient and the vertical gradient are absolute values.

Claim 57 (previously presented) The method as recited in claim 54, further comprising the steps of:

d) performing a differential pulse code modulation (DPCM) coding on the predictive DC coefficient (DC_P) and the DC coefficient (DC_B) of the target block, thereby generating prediction error (DC_T); and

e) transmitting the prediction error to a decoder.

Claim 58 (previously presented) A block based video coding apparatus, comprising:

a DCT portion for receiving texture data, performing a discrete cosine transform (DCT) for the texture data, and outputting DCT coefficients including DC coefficients and AC coefficients;

a DC coefficient storage portion for temporarily storing the DC coefficients of the three adjacent blocks including the left upper block (B1), the upper block (B2) and the left block (B3) and outputting the DC coefficients; and

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a predictive block selector for receiving the DC coefficients of said three adjacent blocks, selecting the predicted DC coefficients of the target block between the DC coefficient (DC_B2) of the upper block and the DC coefficient (DC_B3) of the left block, and outputting the predicted DC coefficient.

Claim 59 (previously presented) The apparatus as recited in Claim 58, further comprising:

a DPCM coder for performing a differential pulse code modulation (DPCM) on the predictive DC coefficient (DC_P) and the DC coefficient (DC_B) of the target block, thereby generating prediction error (DC_T) and transmitting the prediction error to a decoder.

Claim 60 (previously presented) The apparatus as recited in Claim 58, wherein said predictive block selector comprises:

a first subtractor in communication with the DC coefficient storage portion for determining the vertical gradient between the DC coefficient of the left upper block (B1) and the DC coefficient of the left block (B3);

a second subtractor in communication with DC coefficient storage portion for determining the horizontal gradient between the DC coefficient of the left upper block(B1) and the DC coefficient of the upper block (B2); and

a comparator in communication with the first and second subtractors for comparing the vertical gradient with the horizontal gradient.

Claim 61. (previously presented) The apparatus as recited in Claim 60, further comprising an absolute value calculator in communication with at least one of the first and the second subtractors.